Full view VA color LCD screen

60W

Nc DC power supply

Constant voltage, constant current, constant power

6.0-36.00 V	0-36.00 V	0-5.000 A	60 W	10 groups
Input voltage	Output voltage	Output current	Output power	Storage space

XY-SK60

Third generation upgrade

120W

simply the all-viewing-angle VA color LCD DC buck-boost power supply · CC/CV/CW

6.0-36.00 V	0-36.00 V	0-6.000 A	120 W	10 group
Input voltage	Output voltage	Output current	Power output	Storage space

Fully protected: ☑ Anti-reverse ☑ Wanti-backflow ☑ Vunder-voltage ☑ over-voltage ☑ over-current ☑ over-temp ☑ over-power ☑ over temperatur

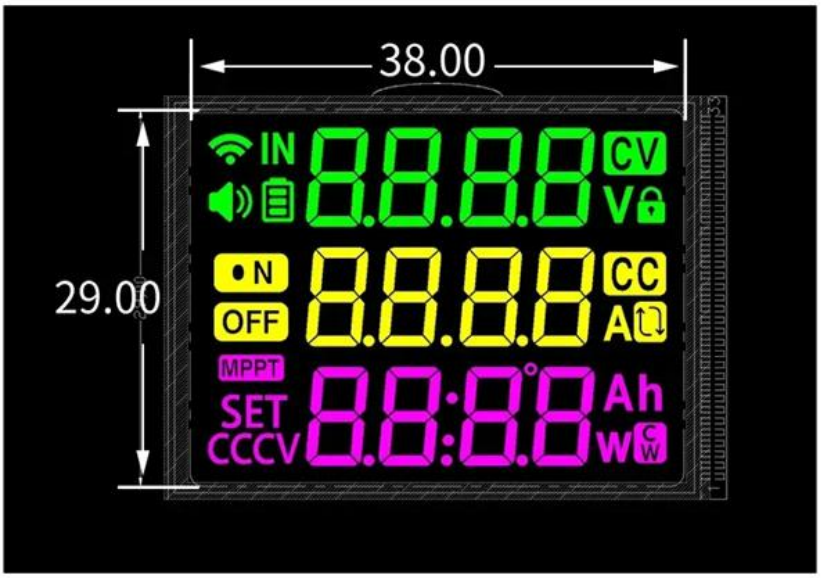
Supports the standard Modbus protocol forserial communication

Support firmware upgrade
anti-backflow
Support MPPT solar charging

True third-generation upgraded version

The all-viewing-angle VA color LCD

Colorful LCD with large font



Visual range: 38*29mm The LCD screen is over 1.8 inches!

The LCD screen has a reasonable layout with large, full, and rounded fonts.

This professional power supply LCD screen has all the features you want!

Third generation upgrade 6A/120W

Simply the all-viewing-angle VA color LCD

Large font color screen !

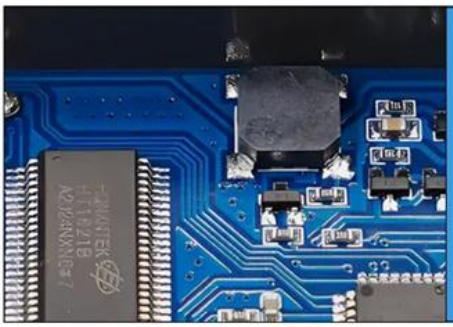
Note: The 120W is a conservative power rating. With software support, enabling a power output of up to 150W. Under optimal cooling conditions, the power output can reach between 130W and 150W.

01 The LCD screen is more than 1.8 inches!

02 Integrated moldedfrosted panel

03 High quality aluminumalloy knob cap feel good

Product details

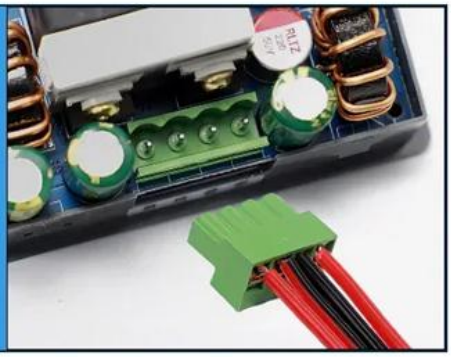


Built-in buzzer

Key prompt
alarm prompt

Upgrade the plug and pull terminals

Easy to disassemble and replace.



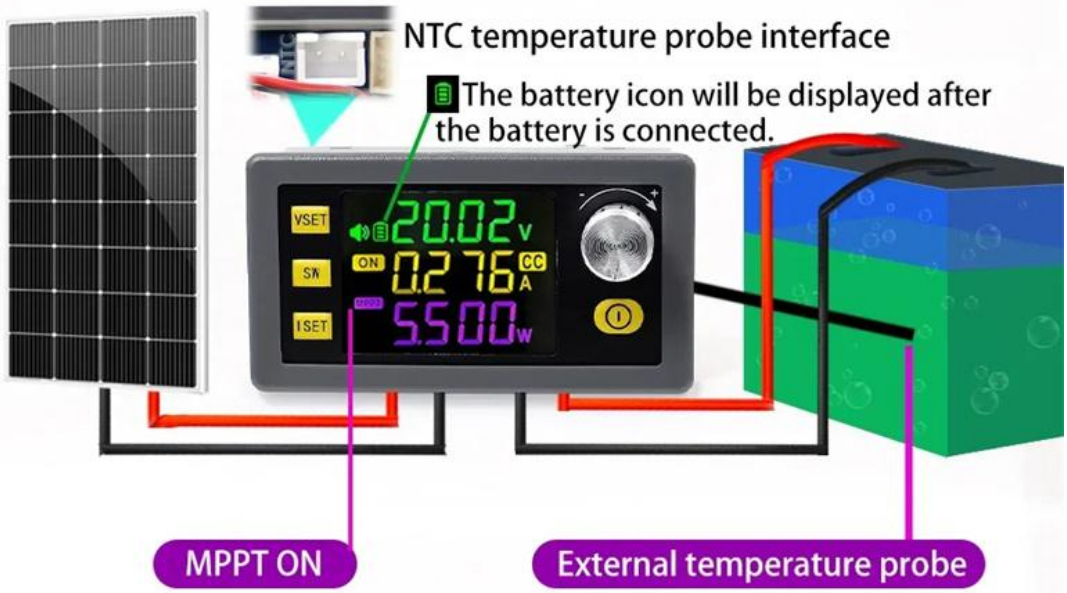
Product parameters			
Product name	DC buck-boost power supply	Model	XY-SK60
Input voltage	6.0~36V	Output voltage	0~36V
Output current	0~5.000A	Accuracy of voltage	±0.5%+1 word
Power output	60W	Accuracy of current	±0.5%+3 word
Resolution of voltage	0.01V	Resolution of current	0.001A
Storage data group	10 groups	Soft start	YES
Screen size	Over 1.8-inch LCD with a viewable area of 38*29mm		
MPPT function	Support MPPT solar charging	Buzzer	YES
Efficiency of conversion	About 88%	Number of buttons	5
Product size Package size	79*50*43mm 104*70*52mm	Product weight with packaging	96g 115g
Protection mechanism			
Anti-reverse	YES	anti-backflow	YES
under-voltage	(Adjustable 5.5-36V, default 5.5V)		
over-voltage	(Adjustable from 0 to 38V, default is 38V)		
over-current	(Adjustable from 0 to 5.2A, default 5.2A)		
over-power	(Adjustable from 0 to 80W, default is 65W)		
over-temp	Adjustable from 0 to110 °C , default is 95 °C		
over-time out	(Adjustable from 0 to 100h, off by default)		
over-capacity	(Adjustable from 0 to 9999Ah, disabled by default)		
over-energy	(Adjustable from 0 to 4200KWh, off by default)		

Product parameters			
Product name	DC buck-boost power supply	Model	XY-SK120
Input voltage	6.0~36V	Output voltage	0~36V
Output current	0~6.000A	Accuracy of voltage	±0.5%+1 word
Power output	120W	Accuracy of current	±0.5%+3 word
Resolution of voltage	0.01V	Resolution of current	0.001A
Storage data group	10 groups	Soft start	YES
Screen size	Over 1.8-inch LCD with a viewable area of 38*29mm		
MPPT function	Support MPPT solar charging	Buzzer	YES
Efficiency of conversion	About 88%	Number of buttons	five
Product size Package size	79*50*43mm 104*70*52mm	Product weight with packaging	108g 127g
Protection mechanism			
Anti-reverse	YES	anti-backflow	YES
under-voltage	(Adjustable 5.5-36V, default 5.5V)		
over-voltage	(Adjustable from 0 to 38V, default is 38V)		
over-current	(Adjustable from 0 to 6.2A, default 6.2A)		
over-power	(Adjustable from 0 to 150W, default is 125W)		
over-temp	Adjustable from 0 to110 °C , default is 95 °C		
over-time out	(Adjustable from 0 to 100h, off by default)		
over-capacity	(Adjustable from 0 to 9999Ah, disabled by default)		
over-energy	(Adjustable from 0 to 4200KWh, off by default)		

With anti-backflow function, it can charge various rechargeable batteries.

With MPPT function, it supports MPPT solar charging.

External temperature probe can be connected, supporting over-temperature protection. Attach the external temperature probe to the battery, and it will automatically stop charging in case of over-temperature.



Attention: This product does not have output reverse connection protection. Reversing the positive and negative terminals of the battery will damage the device.
Battery charging requires certain professional knowledge. Non-professionals are not allowed to charge directly to prevent fire and explosion.

Button Function Introduction

VSET Button
Short Press: Set voltage CV
Long Press: Enter or exit the callout data group UI

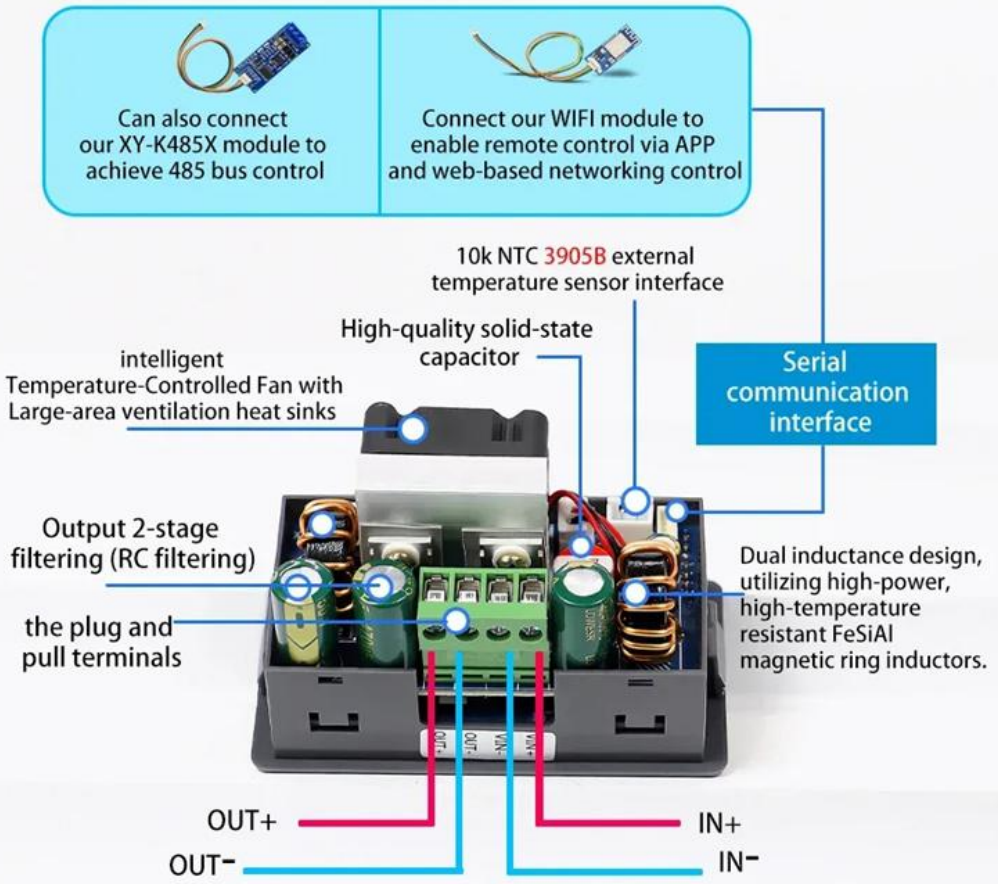
Encoder Button
Short Press: Switch between output power W/capacity Ah/energy Wh/time h/ temperature °C/display in rotation
Long Press: Turn on/off the key lock

SW Button
Short Press: Switch between input/ output voltage or shift
Long Press: Enter or exit the system settings UI

ISET Button
Short Press: Set current CC
Long Press: Enter or exit the data group settings UI

Power Button
Short Press: Turn on/off the power output
Long Press: Reset in the capacity Ah/ energy Wh/time h UI by long pressing

Introduction to Functional Interfaces and Wiring



Complete Set of Complementary Commercial Software All Free to Use

Multi-Serial Port Host Software

1.Unlimited Device Connectivity:

The software supports multi-serial port communication, allowing up to 247 devices to be connected to a single serial port. By utilizing multiple serial ports, it enables the control of over a thousand devices in a clustered environment.

2.Batch Control:

The software allows for batch control of all devices under a specific account, including voltage, current, switches, and other parameters. This feature greatly improves efficiency by enabling simultaneous manipulation of multiple devices.

3.Administrative Accounts:

Management accounts can be added to the system, allowing for more secure and controlled access to voltage and current settings. This ensures that only authorized personnel can make changes to critical parameters, reducing the risk of unauthorized modifications or misuse.

Network control anytime, anywhere

LAN penetration, real-time communication
Remote control via external network, unlimited distance

Support email notification, cloud record

PC host computer
Mobile APP Sinilink control
Support Android/iOS

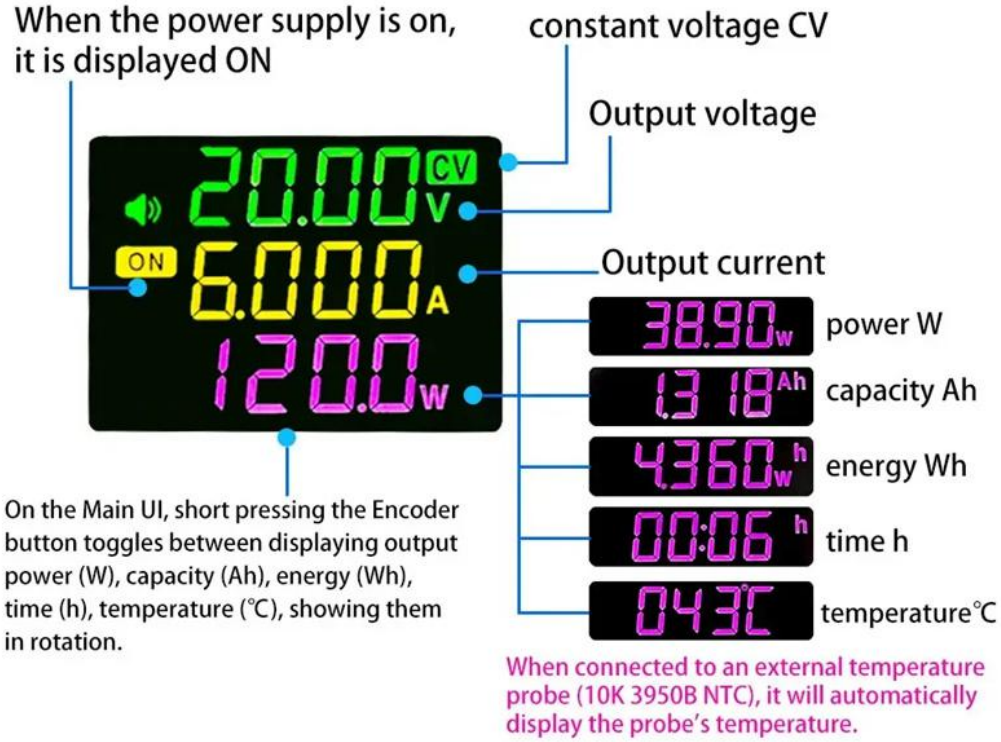
The product supports firmware upgrade to obtain new functions.

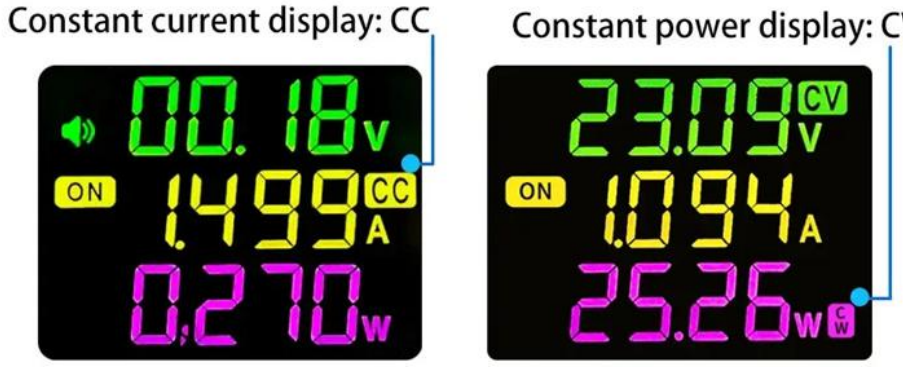
At present, it only supports firmware upgrade through our WiFi module. In the future, it will also be able to upgrade through our multi -serial port host computer software (under development). Stay tuned!

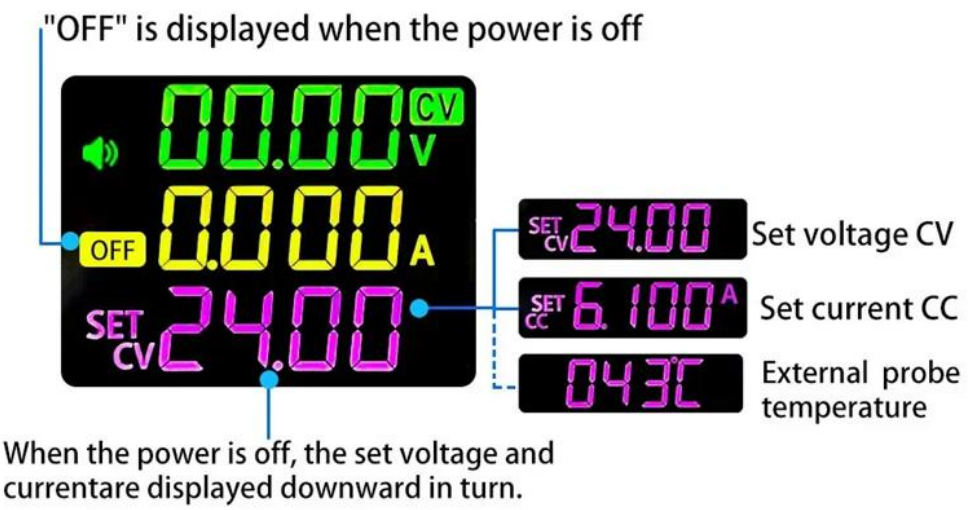
Note: Do not power off during the product upgrade process.
If the product upgrade fails, you can press and hold the power button to power on the product and force it into the upgrade mode.

XY-SK120

Product UI function details





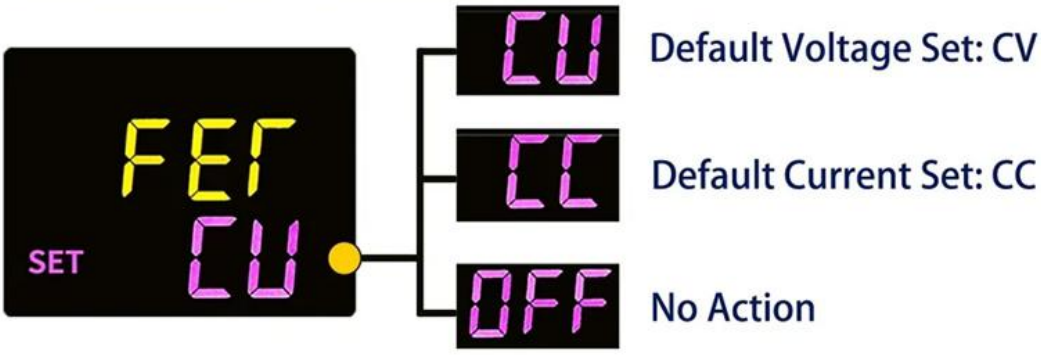


Instructions for Use

1.Setting Voltage and Current:

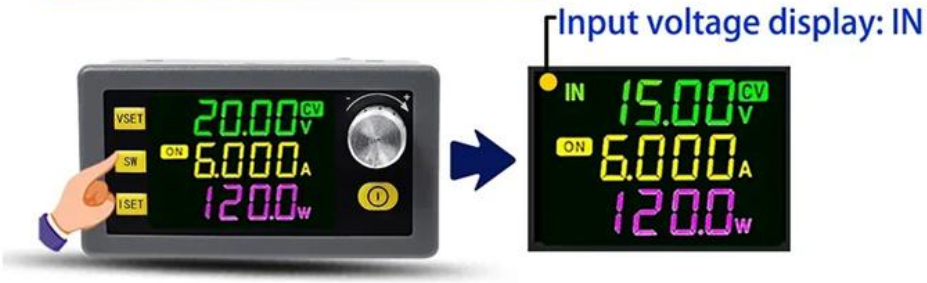
On the main UI, briefly press the VSET button to set the voltage. The LCD will display "SET" in the lower row, and "CV" will flash to indicate that the voltage setting position is selected and blinking. Then, briefly press the SW button or the encoder button to switch the voltage setting position. Adjust the value by rotating the encoder. After setting is complete, briefly press the VSET button to exit and save. To set the current, briefly press the ISET button, and the setting steps are the same as for voltage.

2.Quick Setting of Voltage or Current:



In the system parameter settings UI , set the parameter FET to CV or CC. Rotate the encoder on the main UI to enter the voltage or current setting UI. Rotate the encoder to quickly set the voltage or current.

3.Input/output voltage display:



On the main UI, press the SW button briefly to switch between input and output voltage displays.

4.Checking power (W)/capacity (Ah)/energy (Wh)/time (h):

On the main UI, press the encoder button briefly to switch between displaying power (W)/capacity (Ah)/energy (Wh)/time (h)/temperature (℃) in rotation.

5.key lock:

On the main UI, press and hold the encoder button for 2 seconds to lock the set voltage and current to prevent misoperation; press and hold the encoder button for 2 seconds after locking to unlock.

6.Data Group Function

This product has a total of 10 data groups from Cd0 to Cd9. Press and hold the VSET button on the main UI to access the data group UI

You can press VSET/ISET briefly to switch between constant voltage (CV) and constant current (CC) settings. It supports quick viewing and modification of voltage and current in the data group, as well as SW shift operation.

After confirming the data group, press and hold the VSET/SW button or press the encoder button briefly to select the desired data group.

Set UI Parameter Settings within Data Groups

Press and hold the ISET button on the main interface to enter the settings menu.
The first parameter is to select the data group Cd0-9.

Press VSET briefly to select the next parameter, and press ISET briefly to s
elect the previous parameter. After completing the settings,
press and hold the ISET/SW/encoder button to exit the settings interface.

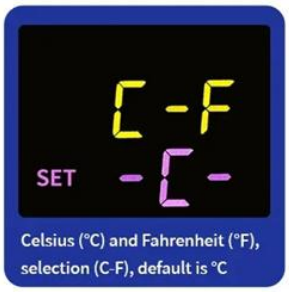
Set UI System Parameter Settings

Press and hold the SW button on the main interface to enter the settings menu. The first parameter is the buzzer setting (bEP). Press VSET briefly to select the next parameter and press ISET briefly to select the previous parameter.

After completing the settings, press and hold the SW/encoder button to exit the settings.

Turn on/off the buzzer (bEP), default is on

LCD brightness adjustment (b-L), default is the brightest



Celsius (°C) and Fahrenheit (°F), selection (C-F), default is °C

Quick voltage or current adjustment (FET), default is voltage CV

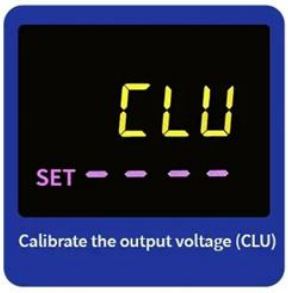
Set the device address (Add)

Set the device communication baud rate (bRE), default: 115200

MPPT solar charging settings (PPT), default is off

Constant Power CW ON/OFF, Default Off

Set the charging cut-off current (bTF), default is off



Calibrate the output voltage (CLU)

Calibrate the output current (CLA)

Current zero calibration (ZER0)

Force the power output to turn off when retrieving data groups (CLOF)

Restore factory settings (RET)

Firmware version number (UER)

Data Group Parameter Settings

Press and hold the ISET button on the main interface to enter the settings menu. The first parameter is to select the data group Cd0-9.

Press VSET briefly to select the next parameter, and press ISET briefly to s elect the previous parameter. After completing the settings, press and hold the ISET/SW/encoder button to exit the settings interface.

Data Group Selection Cd0-Cd9 	Rotate the encoder to select the desired data group Cd0-Cd9. For example, if Cd2 is selected, subsequent parameter settings will be for the Cd2 data group.
Setting Voltage CV 	Briefly press SW or the encoder button to select the position, and rotate the encoder to adjust the value. For instance, setting 12.00 will result in a CV voltage of 12.00V when this data group is accessed.
Setting Current CC 	Briefly press SW or the encoder button to select the position, and rotate the encoder to adjust the value. For example, setting 6.000 will result in a CC current of 6.000A when this data group is accessed. Note: The CV and CC modes switch automatically based on the load. When the load reaches the set CC value, it automatically switches to CC mode.
LVP Settings (Input Under -Voltage Protection) 	Briefly press SW or the encoder button to select the position, and rotate the encoder to adjust the value. For instance, if LVP is set to 12.00V, the output will be shut off for protection when the input voltage drops below 12.00V. After protection, "LUP" will be displayed on the bottom line. Press any button to cancel the alarm. When the input voltage rises above LUP, protection is automatically canceled.
OVP Settings (Over-Voltage Protection) 	Short press SW or encoder button to select the position, rotate the encoder to adjust the value. For instance, if OVP is set to 24.00, when the output voltage exceeds 24.00V, the output will be shut off for protection, thus protecting the load from burnout due to overvoltage. After protection, "OVP" will be displayed on the bottom line. Press any button to cancel the alarm.

OCP Setting **(Over-Current Protection)** 	Short press SW or encoder button to select the position, rotate the encoder to adjust the value. For example, if OCP is set to 2.000, when the output current exceeds 2.000A, the output will be shut off for protection, protecting the load from burnout due to overcurrent. After protection, "OCP" will be displayed on the bottom line. Press any button to cancel the alarm.
OPP Setting **(Over-Power Protection)** 	Short press SW or encoder button to select the position, rotate the encoder to adjust the value. For instance, if OPP is set to 100.0W, when the output power exceeds 100.0W, the output will be shut off for protection, preventing the load from burnout due to overpower. After protection, "OPP" will be displayed on the bottom line. Press any button to cancel the alarm.
OAH Setting **(Over-Capacity Protection)** 	Short press the power button to turn on/off the over-capacity protection function. ---- This function is off by default. Short press the power button to activate this function, then short press SW or encoder button to select the position, rotate the encoder to adjust the value. Long press the power button to switch the decimal point position (0.000Ah, 00.00Ah, 000.0Ah, 0000Ah). The maximum setting is 9999Ah. For example, if OAH is set to 2.000Ah, when the cumulative output capacity exceeds 2.000Ah, the output will be shut off for protection. After protection, "OPP" will be displayed on the bottom line. Press any button to cancel the alarm and reset the cumulative capacity.
OPH Setting **(Over-Energy Protection)** 	Short press the power button to turn on/off the over-energy protection function. ---- This function is off by default. Short press the power button to activate this function, then short press SW or encoder button to select the position, rotate the encoder to adjust the value. Long press the power button to switch the decimal point position (0.000Wh, 00.00Wh, 000.0Wh, 0000Wh, 0.0.0.0Wh (representing 0000KWh)). The maximum setting is 4200KWh. For instance, if OPH is set to 500.0Wh, when the cumulative output energy exceeds 5000.0Wh, the output will be shut off for protection. After protection, "OPH" will be displayed on the bottom line. Press any button to cancel the alarm and reset the cumulative energy.

OHP Setting (Over-Time Protection) 	Short press the power button to turn on/off the over-time protection function. ---- This function is off by default. Short press the power button to activate this function, then short press SW or encoder button to select the position, rotate the encoder to adjust the value. The minimum unit is 1 minute, and the maximum setting is 99:59 (99 hours 59 minutes). For example, if OHP is set to 02:30, when the output is on for more than 2 hours and 30 minutes, the output will be shut off for protection. After protection, "OHP" will be display -ed on the bottom line. Press any button to cancel the alarm and reset the cumulative time.
OTP Setting (Over-Temperature Protection) 	Short press SW or encoder button to select the position, rotate the encoder to adjust the value in units of °C or °F (Switch between °C or °F i n the system settings interface). For instance, if OTP is set to 90°C, when the PCB temperature near the power transistor reaches 90°C, the output will be shut off for protection. After protection, "OTP" will be displayed on the bottom line. Press any button to cancel the alarm. When the temperature drops below OTP, the protection will be automatically canceled.
ETP Settings (External Over -Temperature Protection) 	Press the power button briefly to enable/disable the external over -temperature protection function, which is defaulted to "off" when disabled. To enable this function, briefly press the power button, then press the SW or encoder button to select the position, and rotate the encoder to adjust the value. For example, if the ETP is set to 60°C, upon connecting an external temper -ature probe (10K, NTC probe), the output will automatically shut off for protection when the temperature exceeds 60°C. After protection is activated, "ETP" will be displayed on the bottom row. Press any button to cancel the alarm, and the protection will be automat -ically lifted when the temperature falls below the ETP setting. Application Scenario: Attach the external temperature probe to the load (such as a rechargeable battery). When the load temperature exceeds the set temperature, the output will be shut off for protection, effectively preventing the load from overheating and damaging.
PON Settings (Power-On Output) 	Rotate the encoder to select between OFF (output off upon power-on) and ON (output on upon power-on). For example, if PON is set to OFF, then the output is off when the power is just powered on, you need to press the power button to open the output; Otherwise, the output is directly turned on after the power-on.

Introduction to CV/CC/CW Functions

1 When the constant power function is not turned on, the power supply only has the functions of constant voltage (CV) and constant current (CC), which automati -cally switch based on the load;

1.1 When the load current is less than the set constant current value, the power supply is in the constant voltage mode, where the output voltage is the set voltage value CV, and the current is adaptive;

1.2 When the load current exceeds the set constant current value, the power supply automatically enters the constant current mode. At this time, the output current is the set constant current value CC, and the voltage is adaptive;

2 After the constant power function is turned on, the constant current value defaults to the maximum value , and the constant voltage value CV serves as the initial voltage (set to a reasonable value based on actual conditions). After the power supply is turned on, the equivalent resistance R of the load is calculated using Ohm's law R=U/I. Then, the corresponding voltage can be calculated based on the set constant power value using the power formula $P=U^2/R$. At this point, the constant power point algorithm automatically follows, and the constant power is achieved.

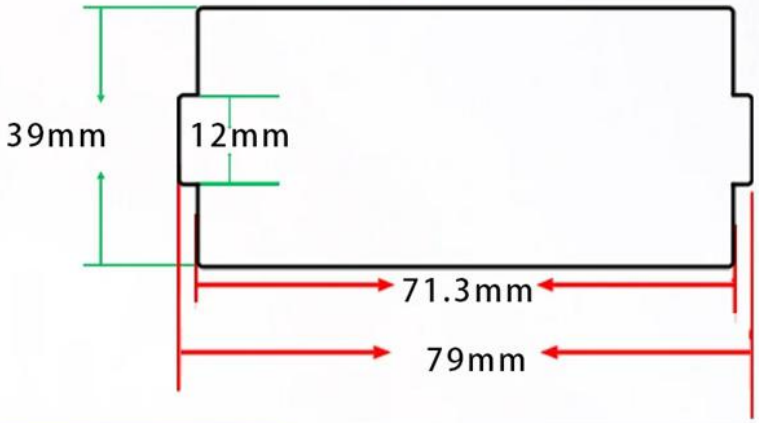
Constant Power Switch and Constant Power Value Setting

1. Press and hold SW on the main UI to enter system set.
2. Press ISET/VSET briefly to switch to the "-CP-" constant power switch option. Press ON to enable constant power and OFF to disable it.
3. After enabling constant power, press ISET briefly on the main interface to modify the value of constant power.

Product size

weight: 108g

The recommended opening size is as follows:



Package size

Package weight included:127g